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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,769	10/30/2003	Elena Grassi	Q78055	6931

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/695,769	Applicant(s) GRASSI ET AL.	
	Examiner Arnel C. Lavarias	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/10/06, 1/11/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/11/06 has been entered.

Response to Amendment

2. The amendments to Claims 1-10 in the submission dated 1/11/06 are acknowledged and accepted.
3. The addition of Claims 13-14 in the submission dated 1/11/06 is acknowledged and accepted.

Response to Arguments

4. The Applicants argue that, with respect to Claims 1 and 6, as well as Claims 2-5, 7-12 which depend on Claims 1 and 6, Kadrmas fails to teach or reasonably suggest the transmitting beam axis incident to the primary optical surface not coinciding with the receiving beam axis incident to the primary optical surface. For support, the Applicants cite *Phillips v AWH*, 415 F.3d, 1303, 1312 (Fed. Cir. 2005) (en banc), noting that claim

Art Unit: 2872

language is to be read in light of the specification. The Examiner disagrees with Applicants' arguments that the teachings of Kadrmas do not disclose or reasonably suggest the transmitting beam axis incident to the primary optical surface not coinciding with the receiving beam axis incident to the primary optical surface. As previously discussed in Section 6 of the previous Office Action, dated 10/11/05, the Examiner again reiterates that features upon which applicant relies (i.e., the axes for the transmitting beam and the receiving beam being in the centers of the respective beams) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the instant case, Claims 1 and 6 merely recite at least one transmitting beam *having an axis* and a receiving beam *having an axis*. No special definition for the term 'axis' has been provided within the disclosure of the instant application. Referring to MPEP 2111,

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Further, referring to MPEP 2111.01,

While the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70

USPQ2d 1827, 1834 (Fed. Cir. 2004). ... This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification.

The Examiner also particularly notes that, as discussed in MPEP 2111, “reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from ‘reading limitations of the specification into a claim,’ to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim.” Applicants appear to be importing implied limitations from the specification (i.e. the axes for the transmitting beam and the receiving beam being in the centers of the respective beams), when such limitations are not in the claims. Since the term ‘axis’ has not been expressly defined in the specification, the Examiner has reasonably interpreted this term to generally mean a propagation direction of the light beam. As previously noted, such propagation direction of a light beam and the ‘center line’ of a light beam are not necessarily one and the same, and may be different, as previously shown in Section 6 of the Office Action dated 10/11/05.

5. Claims 1-14 are now rejected as follows.

Claim Objections

6. Claims 5 and 13 are objected to because of the following informalities:

Claim 5 recites the limitation "the secondary optical surface" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "said optical face" in line 2. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, this limitation has been taken to mean 'the primary optical surface'.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 5-8, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadrmas (U.S. Patent No. 3781552), of record.

Kadrmas discloses a bi-directional telescope for a laser on air telecommunication system and method for receiving-transmitting an optical signal through a bi-directional telescope for a laser on air telecommunication system (See for example Figures 1-2), both the telescope and method comprising (providing) a primary optical surface (See for example 50 in Figure 1), comprising at least one illuminated area (See for example 46, 48 in Figure 1) and a reflecting optical surface (See for example 48, 52 in Figure 1); (providing) at least one transmitting device (See for example 22 in Figure 1) forming at least one transmitting beam impinging against the primary optical surface at the at least one illuminated area (See for example 46, 48 in Figure 1), the at least one transmitting beam having a corresponding axis (in this case, an axis of propagation); (providing) a

receiving device (See for example 72 in Figure 1) collecting the power deflected by the reflecting optical surface (See for example 52 in Figure 1) of the primary optical surface into a receiving beam, the receiving beam having an axis (in this case, an axis of propagation); wherein the reflecting optical surface of the primary optical surface is larger than the at least one illuminated area (See 50, 48 in Figure 1) and the transmitting beam axis incident to the primary optical surface does not coincide with the receiving beam axis incident to the primary optical surface (It is noted that certain axes of both the receivers 72 and the source laser 22 are not coincident; also see Section 6 of the Office Action dated 10/11/05). Kadrmas further discloses the telescope further comprising (providing) a secondary optical surface (See for example 56 in Figure 1), wherein the received power deflected by the reflecting optical surface of the primary optical surface is focused (See for example 25 in Figure 1) by the secondary optical surface into the receiving beam; the primary optical surface comprising a hole (See for example hole in 50 of Figure 1); the secondary optical surface comprising a hole (See hole in 56 of Figure 1); the at least one transmitting device being placed fundamentally behind the reflecting optical surface (See 22, 50 in Figure 1, where 'behind' has been taken to be the locations where the reflective optical surface of element 50 does not face) and wherein the telescope further comprises means for deflecting the transmitting beam towards the secondary optical surface (See for example 38 in Figure 1); and the at least one illuminated area overlaps the reflecting optical surface (See 48, 52 in Figure 1, wherein the reflecting optical surface 48, 52 includes/overlaps that area of the surface 48 used for illumination by the source).

9. Claims 1-2, 6-7, 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gould et al. (U.S. Patent No. 4777660).

Gould et al. discloses a bi-directional telescope for a laser on air telecommunication system and method for receiving-transmitting an optical signal through a bi-directional telescope for a laser on air telecommunication system (See for example Figure 1), both the telescope and method comprising (providing) a primary optical surface (See for example 26 in Figure 1), comprising at least one illuminated area (See incident laser beam that strikes surface 26 via elements 14, 16, 18, 19, 20, 22, and 24 in Figure 1) and a reflecting optical surface (See 26 in Figure 1); (providing) at least one transmitting device (See for example 12 in Figure 1) forming at least one transmitting beam impinging against the primary optical surface at the at least one illuminated area, the at least one transmitting beam having a corresponding axis (in this case, the optical axis or center line of the beam); (providing) a receiving device (See for example 28 in Figure 1) collecting the power deflected by the reflecting optical surface (See for example incident light that strikes 28 via elements 25, 26, 24, and 22 in Figure 1) of the primary optical surface into a receiving beam, the receiving beam having an axis (in this case, the optical axis or center line of the beam); wherein the reflecting optical surface of the primary optical surface is larger than the at least one illuminated area (See 26 in Figure 1; col. 10, line 41-col. 11, line 63) and the transmitting beam axis incident to the primary optical surface does not coincide with the receiving beam axis incident to the primary optical surface (It is noted that the optical axes or center lines of both the transmitting beam and the receiving beam are not coincident, See Figure 1). Gould et al. further discloses the

telescope further comprising (providing) a secondary optical surface (See for example 24 in Figure 1), wherein the received power deflected by the reflecting optical surface of the primary optical surface is focused by the secondary optical surface into the receiving beam; the at least one illuminated area overlaps the reflecting optical surface (See 26 in Figure 1); and the axis of the transmitting beam is located at the center of the transmission beam impinging on the primary optical surface, and the axis of the receiving beam is located at the center of the receiving beam deflected from the reflecting optical surface (See incident transmitting and receiving beams on element 26 in Figure 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadrmas in view of Weiss (U.S. Patent No. 3371212), of record.

Kadrmas discloses the invention as set forth above in Claims 1-2, 6-7, except for the at least one transmitting device being placed fundamentally in front of the reflecting optical surface. However, it is well known in the art for such transmitting telescopic optical systems to place the transmitter or source either behind or in front of the reflecting face of the main reflector of the telescopic optical system. For example, Weiss teaches a conventional transmitting and receiving telescopic optical system (See Figure), wherein

the transmitting optical source (See 50 in Figure) is placed in front of (i.e. in locations where the reflecting surface of the primary mirror face) the reflecting surface of the main reflector (See 12 in Figure) of the telescope. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the at least one transmitting device be placed fundamentally in front of the reflecting optical surface, as taught by Weiss, in the telescope and method of Kadrmas, for reducing the physical size of the telescope optical system, while making the source readily accessible for replacement if the source is damaged or requires replacement.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Patent Examiner
Group Art Unit 2872
4/12/06